

beds have joined CDC LABSI plan since 2013. There are 66 intensive care beds totally. Our approaches Care Bundle of CLABSI included five components: hand hygiene, maximal barrier precautions, chlorhexidine 2% skin antiseptics, optimal catheter site and removal of unnecessary. Auditing and facilitating ward staff included: evaluating compliance of insertion procedure of catheters and daily care of catheters and access of caring facilities.

Results: The compliance rate of Care bundle of CLABSI was high: 90%; the mean of compliance rate of hand hygiene was 97% and the correct rate of hand hygiene was 92%; the rate of complete of and access to precaution facilities was near 100%. The knowledge score was 197 with HCWs approaching to 97%. The Blood stream infection rate in 2012 and 2013 were respectively 5.92‰ and 5.40‰; these rate were less 1.66‰ ($p=0.01$) and 2.18‰ ($p=0.07$) respectively than was 7.58‰ in 2011. The HALs in 2012 and 2013 were decreased to 27.70%, 30.74% respectively, especially cardiovascular intensive unit even has become steadily zero percent. The percentage of appreciated places of insertion of Central Line was 53.44%, including 41.26% in internal jugular vein, 12.08% in subclavian vein and 43.29% in femoral vein.

Conclusions: Intervention of Care bundle of CLABSI definitively can improve the care and then reduce HALs rate of Central line in the research hospital. Then still need enhance to choose the proper site of insertion of central line.

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REDUCING CENTRAL CATHETER-RELATED INFECTION IN INTENSIVE CARE UNIT OF A MEDICAL CENTER IMPACT OF IMPLEMENTING CVC BUNDLE

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Purpose: With the growing recognition of the prevent ability of catheter-related bloodstream infections (CRBSIs); reducing the number of CRBSIs acquired in health care facilities has become an important patient safety goal. Successful preventive strategies have recently been reported which have resulted in significant reductions in CRBSIs and their associated adverse outcomes.

Methods: This is a retrospective analysis of prospectively collected data at a medical center with medical ICU (MICU). All patients undergoing non-tunneled CVC placement were included in the study. Data was collected on CRBSI, line days, and serious adverse events from January to Number, 2011 prior to and following policy implementation from December, 2011 to September, 2012. During the intervention period, nursing staff used a post insertion care bundle consisting of daily inspection of the insertion site; site care if the dressing was wet, soiled, or had not been changed for 7 days; documentation of ongoing need for the catheter; performance of hand hygiene before handling the intravenous system; and application of an alcohol scrub to the infusion hub for 15 seconds before each entry.

Results: A total of 126 central venous catheter (CVC) placements were reviewed. We measured central line-associated bloodstream infections per 1,000 central line days and reported quarterly rates. Baseline average central line-associated bloodstream infections per 1,000 central line days was 7.8 and 4.9 for the intervention groups ($P < 0.01$) respectively. There were reduced frequencies in the usage of central venous catheter after the initiation of the quality improvement program. The study revealed that the rate of the central venous catheter usage was 61.3% in baseline group and 51.4% in the intervention group. No difference was seen in the causative pathogens of CRBSIs.

Conclusions: Our data indicate that multidisciplinary, evidenced-based educational interventions can significantly improve targeted measures of CVC use. Our program was successfully implemented with limited resources and should be reproducible at other hospitals.

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EVALUATION OF TOLERABILITY AND ACCEPTABILITY OF ALCOHOL-BASED HANDRUB IN SILOAM HOSPITALS SURABAYA INDONESIA

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Purpose: To evaluate skin tolerability and acceptability of health workers on the use of hand hygiene products alcohol based handrub using Protocol for Evaluation of Tolerability and Acceptability of Alcohol-based Handrub (WHO Guideline on Hand Hygiene, 2009)

Methods: Using the Protocol for Evaluation of Tolerability and Acceptability of Alcohol-based Handrub in WHO multimodal hand hygiene improvement strategy :

- 40 volunteer participants using at least 30 ml of product per day.
- Evaluation includes the following two components:
 1. Objective evaluation: scales to evaluate health care workers skin state
 2. Subjective evaluation: health care workers answer to a questionnaire risk factors for skin damage, product acceptability, and dermal tolerance.
- Use protocol before using the test product : after 3-5 consecutive working days and after 1 month.
- Data analysis using epi info

Results: The result evaluation of the tolerability and acceptability show that the criteria for product acceptability (target $\geq 50\%$) and criteria for skin tolerability (target $\geq 75\%$) had qualified. Result for Product Acceptability : Colour and Fragrance : Colour 85%, smell 62.5%, texture, 82.5%, irritation 77.5%, drying effect 77.5%, easy of use 90%, speed of drying 85%, application 77.5%. Result for Skin tolerability : **State of Skin/Self** (Appearance 75%, Intactness 80%, Moisture content 75%, Sensation 77.5%), **State of Skin/Observer** (Redness 97.5%, Scaliness 90%, Fissures 95%, Visual scoring of Skin Scale 97.5%)

Conclusions: Alcohol based handrub that has been used in Siloam Hospitals Surabaya had qualified the protocol of skin tolerability and acceptability of health workers from WHO standard (2009).

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REDUCING CATHETER-RELATED BLOODSTREAM INFECTION BY IMPLEMENTING HOSPITAL-WIDE CENTRAL VENOUS CATHETER BUNDLE AT A CANCER HOSPITAL

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Purpose: Central venous catheter (CVC) related infection is common in cancer patients. We described our experience of reducing catheter-related bloodstream infection (CRBSI) by implementing hospital-wide CVC bundle care at a cancer hospital.

Methods: We started this hospital-wide CVC bundle since March 9th, 2011. This CVC bundle consisted of five major elements including: hand hygiene, maximal sterile barrier precaution, use of chlorhexidine as skin antiseptic, avoiding femoral site for central venous access, and daily evaluation of CVC indication. Compliance rate were calculated quarterly. Among CVC indwelling patients, CRBSI was confirmed by a positive differential time to positivity between paired blood cultures, or a positive semi-quantitative CVC tip culture. CRBSI incidence (per 1000 catheter days) was calculated quarterly with an equation of: total number of CRBSI cases*1000 / number of total catheter days.